

AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS

1-6. (Cancelled).

7. (Previously Presented) An image forming apparatus, comprising:

an exposer including an organic electroluminescence element having an anode that injects a hole, a luminescent layer having a luminescent region, and a cathode that injects an electron on a board;

a cooler that cools the organic electroluminescence element;

a temperature sensor that detects a temperature of the exposer; and

a controller that operates the cooler when a temperature of the exposer detected by the temperature sensor exceeds a predetermined temperature;

wherein the controller controls the cooler to cool the exposing device to an environmental temperature in a steady state equal to or lower than a crystallizing temperature of an organic substance of the organic electroluminescence element.

8. (Cancelled).

9. (Previously Presented) An image forming apparatus, comprising:

an exposer including an organic electroluminescence element having an anode that injects a hole, a luminescent layer having a luminescent region and a cathode that injects an electron on a board;

a cooler including at least one of a Peltier element, a fan and a fin that cools the organic electroluminescence element;

a temperature sensor that detects a temperature of the exposer; and

a controller that operates the cooler when the temperature of the exposer detected by the temperature sensor exceeds a predetermined temperature, wherein the controller controls the cooler to cool the exposer to an environmental temperature in a steady state equal to or lower than a crystallizing temperature of an organic substance of the organic electroluminescence element.

10-20. (Cancelled).

21. (Previously Presented) An image forming apparatus, comprising:

a photosensitive member;

a charger configured to charge the photosensitive member;

an exposer configured to irradiate the photosensitive member with light to form an electrostatic latent image, the exposer comprising an organic electroluminescence element;

a developer configured to adhere toner to the photosensitive member to form a toner image of the electrostatic latent image;

a transferor configured to transfer the toner image formed on the photosensitive member onto a recording medium;

a fixer configured to fix the toner image transferred onto the recording medium;  
and

a cooler configured to cool the organic electroluminescence element to a predetermined temperature equal to or lower than a crystallizing temperature of an organic substance of the organic electroluminescence element.

22. (Previously Presented) The image forming apparatus according to claim 21, wherein the cooler comprises a Peltier element.

23. (Previously Presented) The image forming apparatus according to claim 21, wherein the cooler comprises a fin configured to radiate heat from the organic electroluminescence element.

24. (Previously Presented) The image forming apparatus according to claim 21, wherein the cooler comprises a fan that blows air toward the exposer.

25. (Previously Presented) The image forming apparatus according to claim 24, further comprising a cabinet, wherein the fan is provided on the cabinet.

26. (Previously Presented) The image forming apparatus according to claim 21, wherein the cooler comprises a thermally conductive sheet provided in a vicinity of the organic electroluminescence element.

27. (Previously Presented) An image forming apparatus, comprising:

- a photosensitive member;
- a charger configured to charge the photosensitive member;
- an exposer configured to irradiate the photosensitive member with light to form an electrostatic latent image, the exposer comprising an organic electroluminescence element;
- a developer configured to adhere toner to the photosensitive member to form a toner image of the electrostatic latent image;
- a transferor configured to transfer the toner image formed on the photosensitive member onto a recording medium;
- a fixer configured to fix the toner image transferred onto the recording medium;
- a cooler configured to cool the organic electroluminescence element; and
- a controller configured to control the cooler to cool the organic electroluminescence element to a predetermined temperature equal to or lower than a crystallizing temperature of an organic substance of the organic electroluminescence element.

28. (Previously Presented) The image forming apparatus according to claim 27, wherein the cooler comprises a Peltier element.

29. (Previously Presented) The image forming apparatus according to claim 27, further comprising a temperature sensor configured to detect a temperature of the exposer, wherein the controller is configured to operate the cooler when the temperature of the exposer detected by the temperature sensor exceeds a predetermined temperature.

30. (Previously Presented) The image forming apparatus according to claim 27, further comprising a temperature sensor configured to detect a temperature of the exposer, wherein the controller is configured to keep the temperature of the exposer within 20 degrees Celsius of an environmental temperature in a steady state.

31. (Previously Presented) The image forming apparatus according to claim 27, wherein the controller is configured to operate the cooler after a predetermined time period has elapsed from when a power source of the image forming apparatus is turned on.

32. (Previously Presented) An image forming apparatus, comprising:  
a photosensitive member;  
a charger configured to charge the photosensitive member;  
an exposer configured to irradiate the photosensitive member with light to form an electrostatic latent image, the exposer comprising an organic electroluminescence element;

a developer configured to adhere toner to the photosensitive member to form a toner image of the electrostatic latent image;

a transferor configured to transfer the toner image formed on the photosensitive member onto a recording medium;

a fixer configured to fix the toner image transferred onto the recording medium;

a temperature maintainer configured to maintain a temperature of the organic electroluminescence equal to or lower than a crystallizing temperature of an organic substance of the organic electroluminescence element.

33. (Previously Presented) The image forming apparatus according to claim 32, wherein the temperature maintainer comprises a fin configured to radiate heat from the organic electroluminescence element.

34. (Previously Presented) The image forming apparatus according to claim 32, wherein the temperature maintainer comprises a fan that blows air toward the exposer.

35. (Previously Presented) The image forming apparatus according to claim 34, further comprising a cabinet, wherein the fan is provided on the cabinet.

36. (Previously Presented) The image forming apparatus according to claim 32, wherein the temperature maintainer comprises a thermally conductive sheet provided in a vicinity of the organic electroluminescence element.

37-38. (Cancelled)

39. (Currently Amended) An image forming apparatus, comprising:

a photosensitive member;

a charger configured to charge the photosensitive member;

an exposer configured to irradiate the photosensitive member with light to form an electrostatic latent image, the exposer comprising an organic electroluminescence element;

a developer configured to adhere toner to the photosensitive member to form a toner image of the electrostatic latent image;

a transferor configured to transfer the toner image formed on the photosensitive member onto a recording medium;

a fixer configured to fix the toner image transferred onto the recording medium;

a cooler configured to reduce heat applied by the fixer to the organic electroluminescence element;

~~The image forming apparatus according to claim 37, further comprising a light sensor configured to detect an amount of light irradiated from the organic electroluminescence element[[,]]; and~~

a controller configured to control the cooler to cool the organic electroluminescence element to a predetermined temperature equal to or lower than a crystallizing temperature of an organic substance of the organic electroluminescence element, wherein the controller operates the cooler when the amount of light detected by the light sensor becomes equal to or less than a predetermined amount.

40. (Cancelled)

41. (Currently Amended) An image forming apparatus, comprising:  
a photosensitive member;  
a charger configured to charge the photosensitive member;  
an exposer configured to irradiate the photosensitive member with light to form  
an electrostatic latent image, the exposer comprising an organic electroluminescence  
element;  
a developer configured to adhere toner to the photosensitive member to form a  
toner image of the electrostatic latent image;  
a transferor configured to transfer the toner image formed on the photosensitive  
member onto a recording medium;  
a fixer configured to fix the toner image transferred onto the recording medium;  
a cooler configured to reduce heat applied by the fixer to the organic  
electroluminescence element;

~~The image forming apparatus according to claim 37, further comprising a~~  
~~darkness sensor configured to detect a darkness of the toner image formed on the~~  
~~recording medium[.]; and~~

a controller configured to control the cooler to cool the organic  
electroluminescence element to a predetermined temperature equal to or lower than a  
crystallizing temperature of an organic substance of the organic electroluminescence  
element, wherein the controller operates the cooler when the darkness of the toner



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image detected by the darkness sensor becomes equal to or less than a predetermined amount.